

WHAT IS CLAIMED IS:

1. A composition for fluororesin powder coating material, which comprises at least two curing systems each comprising a fluororesin having crosslinkable sites
5 and a curing agent reactive to the crosslinkable sites, wherein the respective curing systems substantially independently react and crosslink, and the time required for the relative dynamic viscoelasticity E_r' to increase by 5% from the initial value by curing at 190°C (the
10 crosslinking reaction time) of at least one curing system is different by at least 20 seconds from the crosslinking reaction time of other curing system(s).
2. The composition for fluororesin powder coating material according to Claim 1, wherein one curing system
15 comprises a fluororesin having crosslinkable sites a and a curing agent H_a reactive to the crosslinkable sites a, and another curing system comprises a fluororesin having crosslinkable sites b different from a and a curing agent H_b reactive to crosslinkable sites b.
- 20 3. The composition for fluororesin powder coating material according to Claim 1, wherein one curing system comprises a fluororesin having crosslinkable sites a and a curing agent H, and another curing system comprises a fluororesin having crosslinkable sites b different from a
25 and the curing agent H, wherein the curing agent H is a curing agent reactive to both the crosslinkable sites a and the crosslinkable sites b.

4. The composition for fluororesin powder coating material according to Claim 1, wherein one curing system comprises a fluororesin having crosslinkable sites a and a curing agent Ha having a functional group reactive to the crosslinkable sites a, and another curing system comprises a fluororesin having crosslinkable sites a and a curing agent Ha' having a functional group reactive to crosslinkable sites a.

5. A composition for fluororesin powder coating material, which comprises the following particles (1) and the following particles (2), wherein the particles (1) and the particles (2) are different in their curing temperatures by at least 8°C, and the particles (1) and the particles (2) are substantially independently contained:

The particles (1) are particles for fluororesin powder coating material comprising a fluororesin (A) having hydroxyl groups and a curing agent (α) having a functional group reactive to the hydroxyl groups; and the particles (2) are particles for fluororesin powder coating material comprising a fluororesin (A) having hydroxyl groups and a curing agent (α) having a functional group reactive to the hydroxyl groups, wherein the combination of the fluororesin (A) and the curing agent (α) is different from the combination in the particles (1);

provided that here the curing temperature is meant

for a temperature at which the heat generation peak based on the reaction between the functional groups of the curing agent (α) and the hydroxyl groups of the fluoro-resin (A) starts to rise by the differential scanning calorimetry (DSC) of the particles for fluoro-resin powder coating material.

6. The composition for fluoro-resin powder coating material according to Claim 5, wherein the functional groups of the curing agent (α) in the particles (1) are blocked isocyanate groups, and the functional groups of the curing agent (α) in the particles (2) are blocked isocyanate groups which are different in the reactivity to hydroxyl groups from the blocked isocyanate groups of the curing agent (α) in the particles (1).

7. A composition for fluoro-resin powder coating material, which comprises the following particles (3) and the following particles (4), wherein the particles (3) and the particles (4) are different in their curing temperatures by at least 15°C, and the particles (3) and the particles (4) are substantially independently contained:

The particles (3) are particles comprising a fluoro-resin (B) having 1,2-epoxy groups and a curing agent (β) capable of curing the fluoro-resin (B); and the particles (4) are particles comprising a fluoro-resin (B) having 1,2-epoxy groups and a curing agent (β) capable of curing the fluoro-resin (B), wherein the combination of

the fluororesin (B) and the curing agent (β) is different from the combination in the particles (3);

provided that here the curing temperature is meant for a temperature at which the heat generation peak based
5 on the curing reaction between the curing agent (β) and the fluororesin (B) starts to rise by the differential scanning calorimetry (DSC) of the particles (3) and (4).

8. A process for producing a composition for fluororesin powder coating material, which comprises
10 preparing the following particles (1) and the following particles (2) independently and then, mixing the particles (1) and the particles (2):

The particles (1) are particles for fluororesin powder coating material comprising a fluororesin (A)
15 having hydroxyl groups and a curing agent (α) having a functional group reactive to the hydroxyl groups; and the particles (2) are particles for fluororesin powder coating material comprising a fluororesin (A) having hydroxyl groups and a curing agent (α) having a
20 functional group reactive to the hydroxyl groups, wherein the combination of the fluororesin (A) and the curing agent (α) is different from the combination in the particles (1);

provided that here the curing temperature is meant
25 for a temperature at which the heat generation peak based on the reaction between the functional groups of the curing agent (α) and the hydroxyl groups of the

fluororesin (A) starts to rise by the differential scanning calorimetry (DSC) of the particles for fluororesin powder coating material.

9. A process for producing a composition for
5 fluororesin powder coating material, which comprises preparing the following particles (3) and the following particles (4) independently and then, mixing the particles (3) and the particles (4):

The particles (3) are particles comprising a
10 fluororesin (B) having 1,2-epoxy groups and a curing agent (β) capable of curing the fluororesin (B); and the particles (4) are particles comprising a fluororesin (B) having 1,2-epoxy groups and a curing agent (β) capable of curing the fluororesin (B), wherein the combination of
15 the fluororesin (B) and the curing agent (β) is different from the combination in the particles (3);

provided that here the curing temperature is meant for a temperature at which the heat generation peak based on the curing reaction between the curing agent (β) and
20 the fluororesin (B) starts to rise by the differential scanning calorimetry (DSC) of the particles (3) and (4).

10. An article having a coating film, wherein the coating film is a coating film formed from the composition for coating material as defined in Claim 1.